

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P860234

Luminaire Tested: **SPHB-60SE-M-L750-CD**

Issue Date: 7/11/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P860234  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-60SE-M-L750-CD  
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 5000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

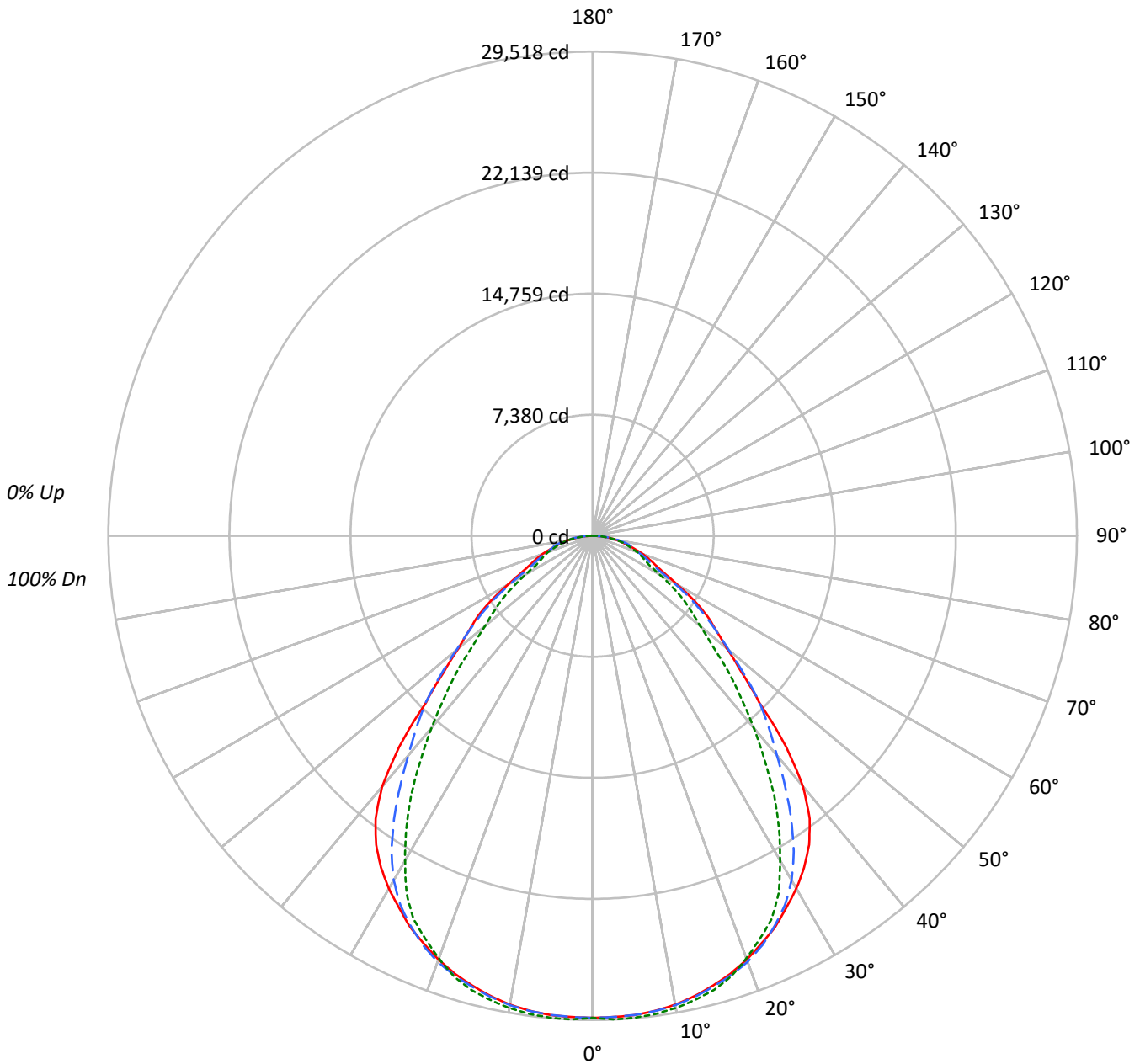
Lumens per Lamp: N/A  
Luminaire Lumens: 60995.0 lumens  
Efficiency: N/A  
Efficacy: 162.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 376  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87																			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58																			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51																			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46																			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41																			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34																			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	93583	93583	93583
5°	93767	93742	94275
10°	93849	93949	94525
15°	93575	93817	94469
20°	93166	93639	92890
25°	92485	92226	90660
30°	91314	89162	84074
35°	89397	82029	74932
40°	82962	72602	63467
45°	64724	64899	52523
50°	52863	53612	42417
55°	47363	45577	37271
60°	37917	35893	29821
65°	31776	29089	26372
70°	30170	27715	26850
75°	27373	29425	25896
80°	27507	30067	27294
85°	23933	28040	22800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2794.1	4.6
10°-20°	8035.8	13.2
20°-30°	11996.2	19.7
30°-40°	13089.9	21.5
40°-50°	10708.1	17.6
50°-60°	7040.6	11.5
60°-70°	4039.3	6.6
70°-80°	2447.7	4.0
80°-90°	821.9	1.3
90°-100°	21.4	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	22826.1	37.4
0°-40°	35916.0	58.9
0°-60°	53664.6	88.0
0°-90°	60973.6	100.0
90°-120°	21.4	0.0
90°-150°	21.4	0.0
90°-180°	21.0	0.0
0°-180°	60995.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	29386	29386	29386	29386	29386	
5°	29332	29286	29324	29444	29491	###
15°	28382	28378	28456	28638	28654	8011
25°	26320	26382	26247	25929	25801	12109
35°	22995	22476	21100	19662	19274	14252
45°	14371	15445	14410	12720	11662	11408
55°	8531	8298	8209	7054	6713	7513
65°	4217	4155	3860	3756	3500	4311
75°	2225	2407	2391	2294	2105	2408
85°	655	744	767	670	624	710
90°	4	54	108	128	136	31
95°	4	8	12	12	8	2
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P860234

CATALOG NUMBER: SPHB-60SE-M-L750-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	29386.2	29386.2	29386.2	29386.2	29386.2
2.5°	29366.9	29324.2	29363.0	29483.1	29518.0
5°	29332.0	29285.5	29324.2	29444.4	29490.9
7.5°	29211.8	29184.7	29223.5	29343.6	29401.7
10°	29021.9	28990.9	29052.9	29157.6	29231.2
12.5°	28739.0	28727.4	28785.5	28936.6	28967.7
15°	28382.4	28378.5	28456.0	28638.2	28653.7
17.5°	27979.3	27975.4	28072.3	28192.5	28149.9
20°	27491.0	27518.1	27630.5	27518.1	27409.6
22.5°	26905.7	26991.0	27018.1	26665.4	26611.2
25°	26320.5	26382.5	26246.8	25929.0	25801.1
27.5°	25564.7	25638.3	25386.4	24933.0	24568.6
30°	24832.2	24762.4	24246.9	23371.0	22863.3
32.5°	23991.1	23743.1	22816.8	21607.5	21146.3
35°	22995.1	22475.7	21099.8	19661.9	19274.3
37.5°	21735.4	20785.9	19282.1	17782.1	17196.9
40°	19956.4	18859.6	17464.3	15914.0	15266.7
42.5°	17464.3	17057.3	15902.4	14158.3	13387.0
45°	14371.4	15445.0	14410.2	12720.3	11662.3
47.5°	12301.8	13793.9	12549.8	11328.9	9871.6
50°	10670.0	11697.1	10821.2	9720.5	8561.6
52.5°	9491.8	9801.9	9449.2	8239.9	7581.0
55°	8530.6	8298.1	8208.9	7053.9	6712.9
57.5°	7336.9	7209.0	6980.3	6150.9	5701.3
60°	5953.2	6224.5	5635.4	5399.0	4682.0
62.5°	4891.2	5158.7	4526.9	4511.4	3914.5
65°	4216.9	4154.8	3860.3	3755.6	3499.8
67.5°	3732.4	3538.6	3437.8	3302.2	3213.0
70°	3240.2	3158.8	2976.6	3003.7	2883.6
72.5°	2701.4	2806.1	2623.9	2674.3	2457.3
75°	2224.7	2406.9	2391.4	2294.5	2104.6
77.5°	1833.2	2027.0	2061.9	1972.8	1817.7
80°	1499.9	1631.7	1639.5	1585.2	1488.3
82.5°	1100.7	1178.2	1236.4	1143.4	1081.3
85°	655.0	744.2	767.4	670.5	624.0
87.5°	213.2	298.4	333.3	344.9	348.8
90°	3.9	54.3	108.5	127.9	135.7
92.5°	3.9	15.5	23.3	34.9	38.8
95°	3.9	7.8	11.6	11.6	7.8
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)